

ISO/IEC/IEEE 24748-7:2026-02 (E)

Systems and software engineering - Life cycle management - Part 7: Application of systems engineering on defence programs

Contents

Page

- Foreword..... v
- Introduction vii
- 1 Scope 1**
- 2 Normative references 1**
- 3 Terms, definitions and abbreviated terms 1**
 - 3.1 Terms and definitions 1
 - 3.2 Abbreviated terms 2
- 4 Conformance 3**
 - 4.1 Intended usage 3
 - 4.2 Full conformance 3
 - 4.2.1 Full conformance to outcomes 3
 - 4.2.2 Full conformance to tasks 3
 - 4.3 Tailored conformance 3
- 5 Key concepts and their application 4**
 - 5.1 General 4
 - 5.2 System concepts 4
 - 5.2.1 Systems 4
 - 5.2.2 System structure 4
 - 5.2.3 Interfacing, enabling, and interoperating systems 4
 - 5.2.4 Concepts related to the system solution context 4
 - 5.2.5 Product line engineering (PLE) 4
 - 5.3 Organizational concepts 4
 - 5.3.1 Organizations 4
 - 5.3.2 Organization and project-level adoption 4
 - 5.3.3 Organization and collaborative activities 4
 - 5.4 System of systems concepts 4
 - 5.4.1 Differences between systems and SoS 4
 - 5.4.2 Managerial and operational independence 4
 - 5.4.3 Taxonomy of SoS 4
 - 5.4.4 SoS considerations in life cycle stages of a system 5
 - 5.4.5 Application of this document to SoS 5
 - 5.5 Life cycle concepts 5
 - 5.5.1 System life cycle model 5
 - 5.5.2 System life cycle stages 5
 - 5.6 Process concepts 6
 - 5.6.1 Criteria for processes 6
 - 5.6.2 Description of processes 6
 - 5.6.3 General characteristics of processes 6
 - 5.7 Processes in this document 6
 - 5.7.1 General 6
 - 5.7.2 Agreement processes 6
 - 5.7.3 Organizational project-enabling processes 7
 - 5.7.4 Technical management processes 7
 - 5.7.5 Technical processes 7
 - 5.8 Process application 7
 - 5.8.1 Overview 7

5.8.2	Process iteration, recursion, and concurrency	8
5.8.3	Process views	8
5.9	Concept and system definition	8
5.10	Assurance and quality characteristics	8
5.11	Process reference model	8
6	System life cycle processes	9
6.1	Agreement processes	9
6.1.1	Acquisition process	9
6.1.2	Supply process	9
6.2	Organizational project-enabling processes	10
6.2.1	Life cycle model management process	10
6.2.2	Infrastructure management process	10
6.2.3	Portfolio management process	10
6.2.4	Human resource management process	11
6.2.5	Quality management process	11
6.2.6	Knowledge management process	12
6.3	Technical management processes	12
6.3.1	Project planning process	12
6.3.2	Project assessment and control process	13
6.3.3	Decision management process	14
6.3.4	Risk management process	15
6.3.5	Configuration management process	16
6.3.6	Information management process	18
6.3.7	Measurement process	19
6.3.8	Quality assurance process	20
6.4	Technical processes	20
6.4.1	Business or mission analysis process	20
6.4.2	Stakeholder needs and requirements definition process	21
6.4.3	System requirements definition process	22
6.4.4	System architecture definition process	23
6.4.5	Design definition process	25
6.4.6	System analysis process	26
6.4.7	Implementation process	28
6.4.8	Integration process	28
6.4.9	Verification process	30
6.4.10	Transition process	32
6.4.11	Validation process	33
6.4.12	Operation process	34
6.4.13	Maintenance process	35
6.4.14	Disposal process	36
	Bibliography	38
	IEEE notices and abstract	40